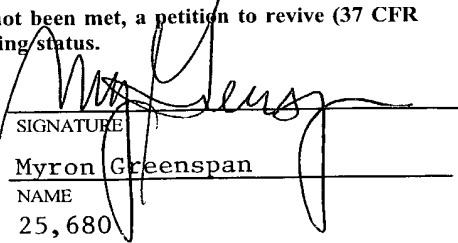


FORM PTO-1390 (REV. 12-2001)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTORNEY'S DOCKET NUMBER P-45 MG	
<b>TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371</b>				U.S. APPLICATION NO. (If known, see 37 CFR 1.5) <div style="font-size: 1.5em; font-weight: bold;">10/089199</div>	
INTERNATIONAL APPLICATION NO. PCT/EP00/08573		INTERNATIONAL FILING DATE September 2, 2000		PRIORITY DATE CLAIMED September 18, 1999	
TITLE OF INVENTION <u>Method for the Production of Undergarments by Means of Adhesion Connection</u>					
APPLICANT(S) FOR DO/EO/US <u>Hans Bauer, Peter Fröhlich and Fred Zeschky</u>					
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:					
<ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a filing under 35 U.S.C. 371.</li> <li>2. <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a filing under 35 U.S.C. 371.</li> <li>3. <input checked="" type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.</li> <li>4. <input checked="" type="checkbox"/> The US has been elected by the expiration of 19 months from the priority date (Article 31).</li> <li>5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2))               <ol style="list-style-type: none"> <li>a. <input checked="" type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input type="checkbox"/> has been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).</li> </ol> </li> <li>6. <input checked="" type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).               <ol style="list-style-type: none"> <li>a. <input checked="" type="checkbox"/> is attached hereto.</li> <li>b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4).</li> </ol> </li> <li>7. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))               <ol style="list-style-type: none"> <li>a. <input checked="" type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input type="checkbox"/> have been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.</li> <li>d. <input type="checkbox"/> have not been made and will not be made.</li> </ol> </li> <li>8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</li> <li>9. <input checked="" type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). (unsigned; signed Declaration will follow)</li> <li>10. <input type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).</li> </ol>					
<b>Items 11 to 20 below concern document(s) or information included:</b>					
<ol style="list-style-type: none"> <li>11. <input type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98.</li> <li>12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.</li> <li>13. <input checked="" type="checkbox"/> A FIRST preliminary amendment.</li> <li>14. <input type="checkbox"/> A SECOND or SUBSEQUENT preliminary amendment.</li> <li>15. <input type="checkbox"/> A substitute specification.</li> <li>16. <input type="checkbox"/> A change of power of attorney and/or address letter.</li> <li>17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821 - 1.825.</li> <li>18. <input type="checkbox"/> A second copy of the published international application under 35 U.S.C. 154(d)(4).</li> <li>19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).</li> <li>20. <input type="checkbox"/> Other items or information:</li> </ol>					

U.S. APPLICATION NO (if known, see 37 CFR 1.5) <b>10/089199</b>		INTERNATIONAL APPLICATION NO <b>PCT/EP00/08573</b>		ATTORNEY'S DOCKET NUMBER <b>P-45 MG</b>		
21. <input checked="" type="checkbox"/> The following fees are submitted: <b>BASIC NATIONAL FEE (37 CFR 1.492 (a) (1) - (5)):</b> Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO ..... <b>\$1040.00</b>  International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO ..... <b>\$890.00</b>  International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO ..... <b>\$740.00</b>  International preliminary examination fee (37 CFR 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(1)-(4) ..... <b>\$710.00</b>  International preliminary examination fee (37 CFR 1.482) paid to USPTO and all claims satisfied provisions of PCT Article 33(1)-(4) ..... <b>\$100.00</b> <b>ENTER APPROPRIATE BASIC FEE AMOUNT =</b>				<b>CALCULATIONS PTO USE ONLY</b>		
Surcharge of <b>\$130.00</b> for furnishing the oath or declaration later than <input type="checkbox"/> 20 <input checked="" type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(e)).				\$ 130.00		
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	\$		
Total claims	16 - 20 =	0	x <b>\$18.00</b>	\$ 0		
Independent claims	0 - 3 =	0	x <b>\$84.00</b>	\$ 0		
MULTIPLE DEPENDENT CLAIM(S) (if applicable)				+ <b>\$280.00</b>	\$ 0	
<b>TOTAL OF ABOVE CALCULATIONS =</b>				<b>\$1,020.00</b>		
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.				+ \$ 510.00		
<b>SUBTOTAL =</b>				<b>\$ 510.00</b>		
Processing fee of <b>\$130.00</b> for furnishing the English translation later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				\$ 0		
<b>TOTAL NATIONAL FEE =</b>				<b>\$ 510.00</b>		
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). <b>\$40.00</b> per property +				\$ 0		
<b>TOTAL FEES ENCLOSED =</b>				<b>\$ 510.00</b>		
				Amount to be refunded:	\$	
				charged:	\$	
a. <input checked="" type="checkbox"/> A check in the amount of \$ <u>510.00</u> to cover the above fees is enclosed.						
b. <input type="checkbox"/> Please charge my Deposit Account No. _____ in the amount of \$ _____ to cover the above fees. A duplicate copy of this sheet is enclosed.						
c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. <u>10-0100</u> . A duplicate copy of this sheet is enclosed.						
d. <input type="checkbox"/> Fees are to be charged to a credit card. <b>WARNING:</b> Information on this form may become public. <b>Credit card          information should not be included on this form.</b> Provide credit card information and authorization on PTO-2038.						
<b>NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR          1.137 (a) or (b)) must be filed and granted to restore the application to pending status.</b>						
SEND ALL CORRESPONDENCE TO: Lackenbach Siegel, LLP One Chase Road Scarsdale, NY 10583 (914) 723 4300						
				SIGNATURE  Myron Greenspan NAME 25,680 REGISTRATION NUMBER		
Dated: March 15, 2002						

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the new U.S. Patent Application of

Bauer et al.

Examiner:

Serial No.: (to be assigned)

Art Unit:

Date Filed:

Docket No.: P-45 MG

For: Method for the Production of Undergarments by means of Adhesion Connection

Based on PCT/EP00/08573

Director of Patents, U.S. Patent Office  
Washington, D.C. 20231

PRELIMINARY AMENDMENT

SIR:

Please amend the new U.S. patent application submitted herewith as follows, and base all fee calculations on these amendments.

IN THE CLAIMS:

Please amend claims 3-16 as follows. (Text showing additions and deletions is found in the Attachment to this Amendment.)

3. (Amended) Method as claimed in claim 1, **characterized in** that elastomeric adhesive connections (12) are used to seam the edges.
4. (Amended) Method as claimed in claim 1, **characterized in** that the margin region (3) of the undergarment is defined by elastomeric adhesion connections (12).
5. (Amended) Method as claimed in claim 1, **characterized in** that the lower layer (11) of the undergarment is disposed in an approximately semicircular, oval or, in any case, deepened recess (14) of the silk screen frame and filled with the

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elastomeric adhesive substance.

6. (Amended) Method as claimed in claim 1, **characterized in** that in the adhesive substance application (12) corresponding addition parts are embedded, which are completely surrounded by the adhesive substance such that no interfering abutment edges are generated.
7. (Amended) Method as claimed in claim 1, **characterized in** that into the recess (14) on the silk screen frame (1) still additional insertion parts are emplaced, such as wires (13) or also closure means (25), such as hook closures, zipper closures or other fastening means.
8. (Amended) Method as claimed in claim 1, **characterized in** that at the site at which the greatest support force is to be attained, the widest adhesive substance bead (12) is applied.
9. (Amended) Method as claimed in claim 1, **characterized in** that additional adhesive substance application dots (5) are applied on the undergarment at those sites at which greater support force is desired.
10. (Amended) Method as claimed in claim 1, **characterized in** that as the material for the adhesive substance (10) an elastomeric Silicone adhesive substance is employed, which is structured as a single-component adhesive substance.
11. (Amended) Method as claimed in claim 1, **characterized in** that as the material for the adhesive substance (10) an elastomeric Silicone adhesive substance is

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employed, which is structured as a multi-component adhesive substance.

12. (Amended) Method as claimed in claim 1, **characterized in** that as the material for the adhesive substance (10) polyurethane adhesive substances are employed.
13. (Amended) Method as claimed in claim 1, **characterized in** that as the material for the adhesive substance (10) unvulcanized rubber adhesive substances are employed.
14. (Amended) Method as claimed in claim 1, **characterized in** that an adhesive substance application (12) onto the undergarment takes place in silk screen processes.
15. (Amended) Method as claimed in claim 1, **characterized in** that an elastomeric adhesive band is produced as an adhesive substance application (12) in silk screen processes.
16. (Amended) Method as claimed in claim 1, **characterized in** that the undergarment is fabricated free of seams.

#### REMARKS

The original German patent application from which this application draws priority has one independent claim, one single dependent claim and 14 multiple dependent claims. This Preliminary Amendment takes multiple dependent claims 3-16 and makes them all singly dependent on claim 1. In this way the application is better suited to examination and search.

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It is believed that this application can now move to a full search and examination,  
and it is respectfully solicited that such search and examination now take place.

Dated: March 15, 2002

Respectfully submitted,

Lackebach Siegel LLP  
One Chase Road  
Scarsdale, NY 10583  
Telephone: 914 723 4300  
MG/as

LACKENBACH SIEGEL, LLP  
Attorneys for Applicant(s)

By: 

MYRON GREENSPAN  
Reg. No.: 25,680

***Certificate of Deposit by Express Mail***

*I hereby certify that this correspondence is being filed by depositing same in an envelope marked Express Mail, addressed to the Director of Patents, U.S. Patent Office, Washington, D.C. 20231, at a duly marked U.S. Postal Service drop box or postal window, with appropriate postage, on the following date:*

Myron Greenspan

Attorney

Signature

March 15, 2002

Date

*Tracking no. EV 060 896 885 US*

*Applicant hereby petitions that any and all extensions of time of the term necessary to render this response timely be granted. COSTS FOR SUCH EXTENSION(S) AND/OR ANY OTHER FEE DUE WITH THIS FEE DUE WITH THIS PAPER THAT ARE NOT FULLY COVERED BY AN ENCLOSED CHECK MAY BE CHARGED TO DEPOSIT ACCOUNT #10-0100.*

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ATTACHMENT. Amended claims 3-16 showing additions and deletions.

3. (Amended) Method as claimed in claim 1 [or 2], **characterized in** that elastomeric adhesive connections (12) are used to seam the edges.
4. (Amended) Method as claimed in claim 1 [one of the preceding claims], **characterized in** that the margin region (3) of the undergarment is defined by elastomeric adhesion connections (12).
5. (Amended) Method as claimed in claim 1 [one of the preceding claims], **characterized in** that the lower layer (11) of the undergarment is disposed in an approximately semicircular, oval or, in any case, deepened recess (14) of the silk screen frame and filled with the elastomeric adhesive substance.
6. (Amended) Method as claimed in claim 1 [one of the preceding claims], **characterized in** that in the adhesive substance application (12) corresponding addition parts are embedded, which are completely surrounded by the adhesive substance such that no interfering abutment edges are generated.
7. (Amended) Method as claimed in claim 1 [one of the preceding claims], **characterized in** that into the recess (14) on the silk screen frame (1) still additional insertion parts are emplaced, such as wires (13) or also closure means (25), such as hook closures, zipper closures or other fastening means.
8. (Amended) Method as claimed in claim 1 [one of the preceding claims], **characterized in** that at the site at which the greatest support force is to be

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attained, the widest adhesive substance bead (12) is applied.

9. (Amended) Method as claimed in claim 1 [one of the preceding claims],  
**characterized in** that additional adhesive substance application dots (5) are applied on the undergarment at those sites at which greater support force is desired.
10. (Amended) Method as claimed in claim 1 [one of the preceding claims],  
**characterized in** that as the material for the adhesive substance (10) an elastomeric Silicone adhesive substance is employed, which is structured as a single-component adhesive substance.
11. (Amended) Method as claimed in claim 1 [one of the preceding claims],  
**characterized in** that as the material for the adhesive substance (10) an elastomeric Silicone adhesive substance is employed, which is structured as a multi-component adhesive substance.
12. (Amended) Method as claimed in claim 1 [one of the preceding claims],  
**characterized in** that as the material for the adhesive substance (10) polyurethane adhesive substances are employed.
13. (Amended) Method as claimed in claim 1 [one of the preceding claims],  
**characterized in** that as the material for the adhesive substance (10) unvulcanized rubber adhesive substances are employed.
14. (Amended) Method as claimed in claim 1 [one of the preceding claims],



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**characterized in** that an adhesive substance application (12) onto the undergarment takes place in silk screen processes.

15. (Amended) Method as claimed in claim 1 [one of the preceding claims],  
**characterized in** that an elastomeric adhesive band is produced as an adhesive substance application (12) in silk screen processes.
16. (Amended) Method as claimed in claim 1 [one of the preceding claims],  
**characterized in** that the undergarment is fabricated free of seams.

3/parts

## Method for the Production of Undergarments by means of Adhesion Connection

The invention relates to a method for producing, by means of adhesion connection, undergarments in particular brassieres, pantie-girdles, sports pants and the like. In the case of the previously known undergarments the disadvantage is encountered, that seam connections are required in order to connect the different layers or parts of the undergarment with one another. However such seams have the disadvantage that the seam material has an elastic behavior which differs from the textile material itself such that the wearing properties are impaired.

In particular in the development of an undergarment as a brassiere the disadvantage exists that the wearing comfort is impaired when applying seams.

While brassieres have become known which are formed without seams, they suffer the disadvantage that the support and bearing force is strongly impaired since the elasticity is provided by the fabric alone and not by other addition means.

In this connection EP 0 809 945 A2 discloses a seamless ladies undergarment, in particular a brassiere, which is comprised of several parts which include textile, thermoplastically meltable fibers, the parts of which are thermally welded. Reinforcement parts can be laminated onto them to reinforce individual sections.

The invention is therefore based on the task of developing an undergarment without seams of the above type such that the wearing comfort is at least equal to or better than that of known undergarments, but that a significantly higher support force can be attained.

The solution to the task posed is achieved through a method according to claim

1.

An essential characteristic of the invention is that for improving the support force of the undergarment at least in the margin region an elastomeric synthetic adhesion band is applied, which is disposed between the upper and the lower layer of the undergarment.

With this technical teaching according to the method claim, it is now possible for the first time that, instead of a seam, which is required within prior art in order to seam the edges, an elastomeric adhesion connection is employed, which is disposed at least in the margin region of the undergarment and defines the margin region.

If such an elastomeric adhesion band is employed as the margin region, the advantage is obtained that the margin regions of this undergarment are virtually elastically resilient and can be stretched like a rubber band, i.e. the entire garment develops very high support comfort.

The introduced elastomeric adhesive bands thus lend the undergarment an extraordinarily high resilient elasticity and very good extensibility such that two demands, which are contradictory per se, are combined with one another:

For one, excellent wearing comfort is attained, since all seams can be omitted and, for another, high support comfort and high support force is attained, since, due to the rubber-elastic properties of the elastomeric adhesive bands, which best completely surround the undergarment, high elasticity of the material and good adaptation to the body is obtained.

A preferred embodiment of the method provides that the elastomeric adhesive band is produced as an application of an adhesion substance in silk screen processes.



the layer and connects the two layers elastomerically with one another.

A preferred embodiment of the invention provides that the thickness of the adhesive substance bead is approximately 2 to 3 mm, with the width of the adhesive substance bead extending approximately in the range from 2 mm to 20 mm.

The wider the adhesive substance bead is implemented, the higher is the support force in the region of the undergarment in which a corresponding support force is desired.

Accordingly the width of the adhesive substance bead depends on the type of the undergarment and, incidentally, the widest adhesive substance bead is also applied depending on the site on the undergarment at which the greatest support force is to be attained.

A further implementation of the present invention provides that an adhesive substance bead is not only developed as an adhesive substance bead enwrapped by an upper and a lower layer of the undergarment, but rather that still additional adhesive substance application dots are applied onto the undergarment at the sites at which greater support force is desired.

Such application dots penetrate the upper as well as also the lower layer and are distributed dot-wise in mutual spacing from one another, and the dots, in the range from approximately 2 mm to 5 mm diameter, can be arranged with a mutual distance of for example 1 mm (minimum) and 20 mm (maximum).

The closer such adhesive substance application dots are disposed with respect to one another, the greater is the support and holding force of the undergarment at this point.





The application of an adhesive substance bead according to the right-hand representation in Figure 1 takes place with a silk screen configuration according to Figure 2. Herein a silk screen 6 is placed onto the lower layer 11 of the brassieres 2, with a recess 14 being formed in the silk screen frame 1 in the area which subsequently becomes the margin region. The lower layer 11 is pressed into this recess such that a receptacle is formed which is filled with the adhesive substance 12. The adhesive substance 10 is herein passed with a silk screen squeegee 8 through corresponding screen apertures 7, with the squeegee being moved in the direction of arrow 9.

Consequently, a complete adhesive substance application 12 takes place in the region of the recess 14. It is important that into this recess 14 still additionally insertion parts can be placed, such as for example a wire 13, which in this case is completely enveloped and encompassed by the adhesive substance application 12.

After the adhesive substance application 12 in the lower layer 11 has been completed, an upper layer 15 according to Figure 3 is placed onto the lower layer 11 and, in the region of the recess 14, the two parts are pressed against one another such that the adhesive substance application 12 penetrates also into the upper layer 15 and joins the two layers with one another in this region.

It is now possible to cut the garment in the region of a cutting edge 16, whereby the previously described margin region 3 results.

According to Figure 4 it is evident that the adhesive substance application 12 has extended also into the extension regions 17 into the upper and lower layer 11, 15, such that the two layers are joined one to the other through the previously described adhesive substance bead (adhesive substance application 12).



Figure 4 shows simultaneously that here the wire 13 is fully encompassed by the adhesive substance and is secured on all sides such that no interfering abutment edges result. Thus, the wire 13 is completely enveloped.

Consequently, very high wearing comfort results since in the proximity outside of the adhesive substance seam, the layers are disposed loosely one on the other, i.e. they can form an interspace 22 with one another, whereby the wearing comfort is further improved. Hereby breathing activity is significantly improved since a corresponding air cushion is formed in the interspace 22, which has a climatizing effect.

Figure 5 shows as a further embodiment example that the adhesive substance bead can be provided not only in the margin region 3 according to Figure 4, but rather that outside of the margin region 3 also still an additional continuous coating region 18 is provided, which is developed such that it is highly flat between the upper and lower layer and just enough adhesive substance is employed for the extension regions 17 not to penetrate through the surfaces of the upper and lower layer. Thus, in this coating region 18 only the upper and lower layers are adhered with one another without the adhesive substance penetrating from the surface. Based on this, it is evident that here an excellent support elasticity is achieved for, in addition to the elasticity of the margin region 3, entire coating regions 18 are additionally elastomerically equipped.

Such an application example is also shown in Figure 6, in which it is evident that in a side portion 21 in a lower margin region 3 (which is equipped with the adhesive substance bead) a lower margin 24 is equipped with the coating corresponding to the above described coating region 18. Hereby an excellent support and shape force results, especially even if in the side portion 19 additionally a coating region 20 is

provided, extending parallel to the bust portion 4 and extending somewhat obliquely upwardly, which is developed in the same way as the coating region 18.

The two coating regions 20, 21, can herein transition onto into the other in order to yield excellent support and shape elasticity in side portion 19.

The margin region 23 in this case is only equipped with an adhesive substance bead without in this region the wire 13 needing to be disposed.

Figure 6 incidentally shows that in the adhesive substance bead also corresponding closure elements 25 can be embedded.

Figure 7 depicts a section through such a margin region 23, wherein it can be seen that, by means of an adhesive substance application 12 (adhesive substance bead), the upper as well as also the lower layer are adhered one to the other, whereby a relatively flat (elliptic) adhesive substance bead results between the two layers and the adhesive substance extends only into the extension regions 17 of the two layers without reaching the surface.

Figure 5 shows on the left-hand side that, in addition, to the improvement of the support elasticity, still adhesive substance dots in the form of application dots 5 can be applied.

Instead of a continuous bead, as is shown in Figure 7, dot-form adhesive substance application dots can also be provided, as is shown in Figure 5.

Such adhesive substance dots (application dots 5) have, incidentally, in addition a massaging effect provided they have the corresponding thickness. Such adhesive substance dots can therefore especially also be applied in the pants area - in the region of the seat in order to support the buttocks.

## Drawing Legends

1. Silk screen frame
2. Brassiere
3. Margin region
4. Bust portion
5. Application dots
6. Silk screen
7. Screen aperture
8. Squeegee
9. Direction of arrow
10. Adhesive substance
11. Lower layer
12. Adhesive substance application
13. Wire
14. Recess
15. Upper layer
16. Cutting edge
17. Extension region
18. Coating region
19. Side portion
20. Coating region
21. Coating region
22. Interspace
23. Margin region
24. Lower margin
25. Closure element

## Patent Claims

1. Method for the production of undergarments, in particular brassieres, pantie-girdles, sports pants and the like, **characterized in** that an upper layer (15) and a lower layer (11) of the undergarment are connected with one another in the margin region by elastomeric synthetic adhesive substance applications (12), wherein when the adhesive means (10) has not yet set, the upper layer of the garment (15) is placed onto the lower layer (11) and pressed onto it, whereby adhering of the upper to the lower layer occurs in the region of this adhesive substance application (12).
2. Method as claimed in claim 1, **characterized in** that the lower layer (11) and the upper layer (15) of the garment are adhered one to the other and form between them a flat adhesive substance application (12), which subsequently extends into the upper layer (15) as well as also into the lower layer (11) and elastomerically joins the two layers with one another.
3. Method as claimed in claim 1 or 2, **characterized in** that elastomeric adhesive connections (12) are used to seam the edges.
4. Method as claimed in one of the preceding claims, **characterized in** that the margin region (3) of the undergarment is defined by elastomeric adhesion connections (12).
5. Method as claimed in one of the preceding claims, **characterized in** that the lower layer (11) of the undergarment is disposed in an approximately semicircular, oval or, in any case, deepened recess (14) of the silk screen frame

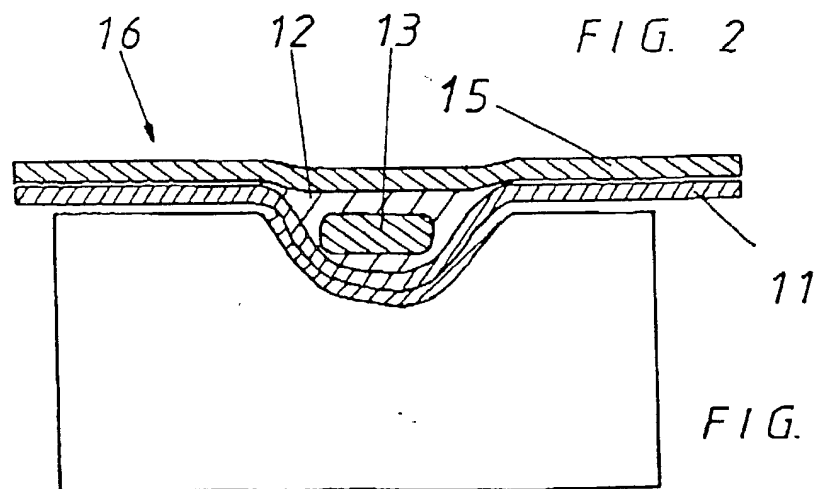
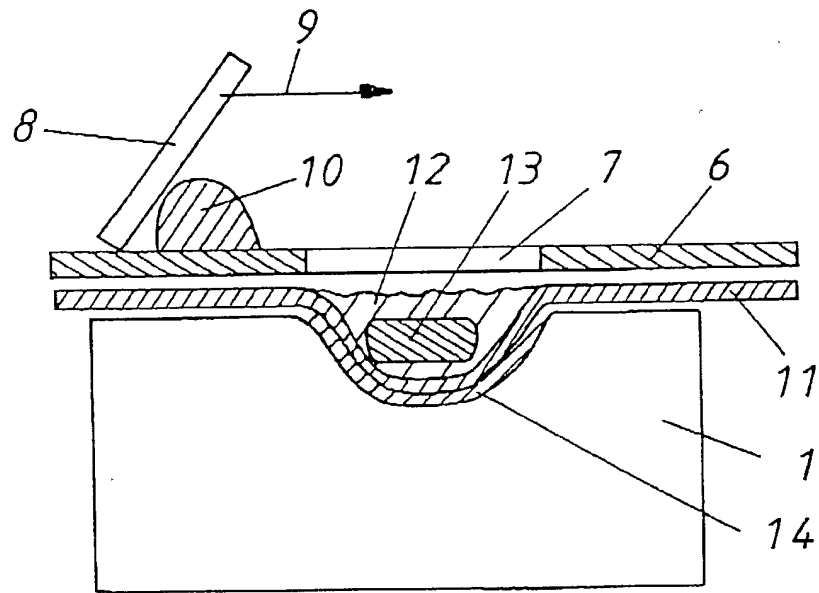
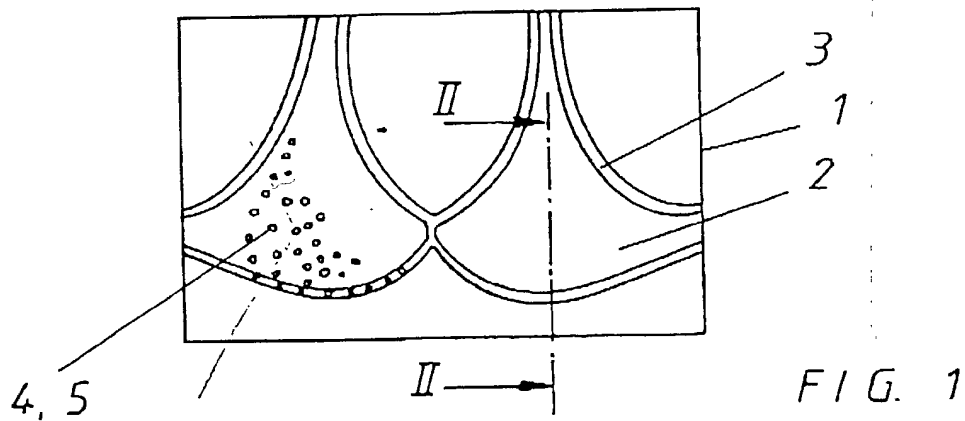
and filled with the elastomeric adhesive substance.

6. Method as claimed in one of the preceding claims, **characterized in** that in the adhesive substance application (12) corresponding addition parts are embedded, which are completely surrounded by the adhesive substance such that no interfering abutment edges are generated.
7. Method as claimed in one of the preceding claims, **characterized in** that into the recess (14) on the silk screen frame (1) still additional insertion parts are emplaced, such as wires (13) or also closure means (25), such as hook closures, zipper closures or other fastening means.
8. Method as claimed in one of the preceding claims, **characterized in** that at the site at which the greatest support force is to be attained, the widest adhesive substance bead (12) is applied.
9. Method as claimed in one of the preceding claims, **characterized in** that additional adhesive substance application dots (5) are applied on the undergarment at those sites at which greater support force is desired.
10. Method as claimed in one of the preceding claims, **characterized in** that as the material for the adhesive substance (10) an elastomeric Silicone adhesive substance is employed, which is structured as a single-component adhesive substance.
11. Method as claimed in one of the preceding claims, **characterized in** that as the material for the adhesive substance (10) an elastomeric Silicone adhesive substance is employed, which is structured as a multi-component adhesive substance.

12. Method as claimed in one of the preceding claims, **characterized in** that as the material for the adhesive substance (10) polyurethane adhesive substances are employed.
13. Method as claimed in one of the preceding claims, **characterized in** that as the material for the adhesive substance (10) unvulcanized rubber adhesive substances are employed.
14. Method as claimed in one of the preceding claims, **characterized in** that an adhesive substance application (12) onto the undergarment takes place in silk screen processes.
15. Method as claimed in one of the preceding claims, **characterized in** that an elastomeric adhesive band is produced as an adhesive substance application (12) in silk screen processes.
16. Method as claimed in one of the preceding claims, **characterized in** that the undergarment is fabricated free of seams.

**Abstract**

The present invention relates to a method for the production of undergarments free of seams with high wearing and support comfort.





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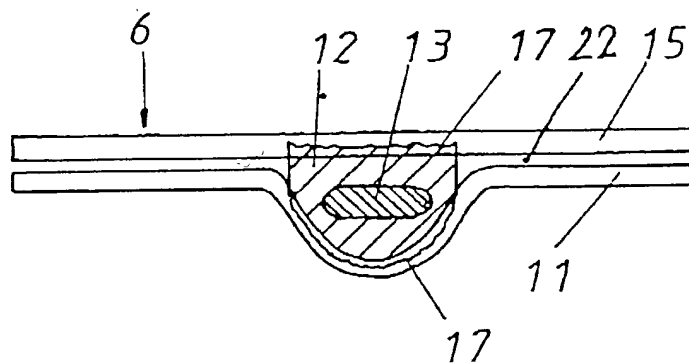


FIG. 4

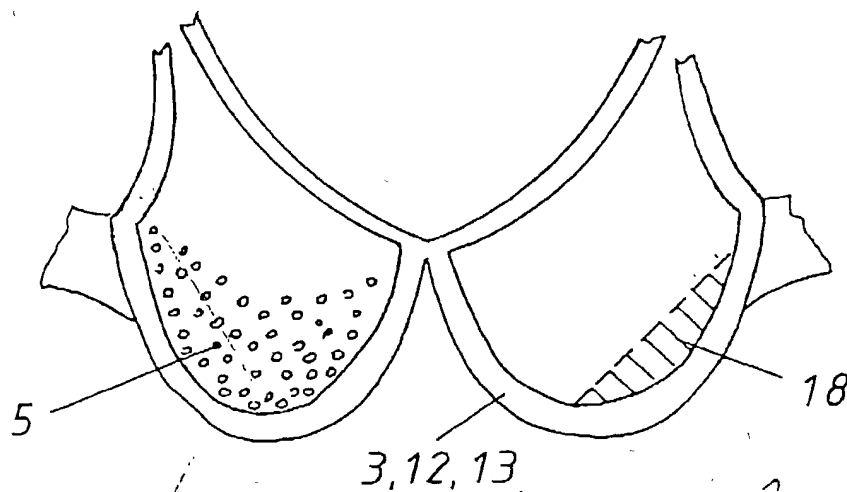


FIG. 5

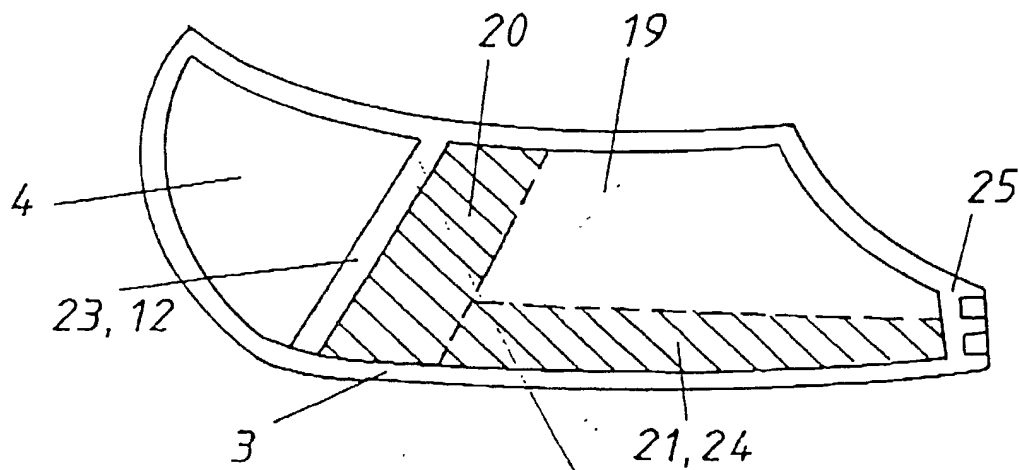


FIG. 6

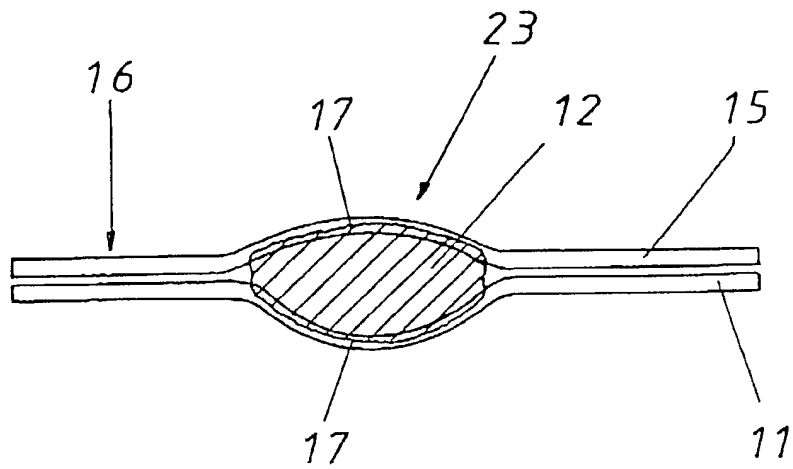
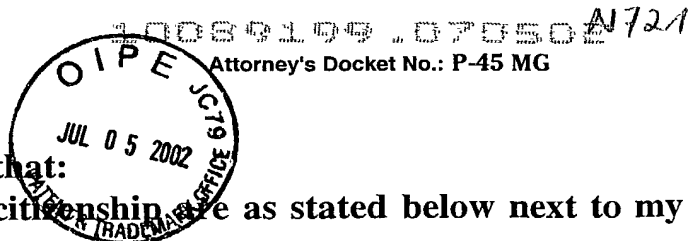


FIG. 7

UNITED STATES -- PATENT  
DECLARATION FOR PATENT APPLICATION



As a below-named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a design patent is sought on the invention entitled Method for the Production of Undergarments by Means of Adhesion Connection, the specification of which

(check one) ☒ is attached hereto.  
☒ was filed on 3/15/2002 as  
Application Serial No.: 10/089,199,  
and was amended on \_\_\_\_\_  
(if applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, §1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s):

Appln. No.	Country	Date Filed	Priority Claimed
199 44 700.4	Germany	September 18, 1999	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
PCT/EP00/08573	PCT	September 2, 2000	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
			<input type="checkbox"/> YES <input type="checkbox"/> NO

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code §112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, §1.56(a) which became available between the filing date of the prior application and the national or PCT international filing date of this application:

Appln. Serial No.	Filing Date	Status: Patented, Pending, Abandoned
		<input type="checkbox"/> Patented <input type="checkbox"/> Pending <input type="checkbox"/> Abandoned
		<input type="checkbox"/> Patented <input type="checkbox"/> Pending <input type="checkbox"/> Abandoned
		<input type="checkbox"/> Patented <input type="checkbox"/> Pending <input type="checkbox"/> Abandoned

**POWER OF ATTORNEY**

I hereby appoint the following attorney(s) and/or agent(s) to prosecute the application entitled Method for the Production of Undergarments by Means of Adhesion Connection and to transact all business in the Patent and Trademark Office connected therewith:

HENRY A. MARZULLO, JR., Reg. No. 20,910; HOWARD N. ARONSON, Reg. No. 27,302; MYRON GREENSPAN, Reg. No. 25,680; MARVIN FELDMAN, Reg. No. 25,797; J. HAROLD NISSEN, Reg. No. 17,283; and THOMAS BLANKINSHIP, Reg. No. 39,909.

Address all telephone calls to Myron Greenspan, at telephone number (914) 723-4300, or to the attorney executing the last document; address all correspondence to LACKENBACH SIEGEL at One Chase Road, Scarsdale, New York 10583 U.S.A.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full Name of First or Sole Inventor <u>Hans BAUER</u>	Citizenship GERMAN
RESIDENCE Address -- Street <u>Stollenau 8</u>	POST OFFICE Address - Street (same as residence)
City (Zip) <u>D-72336 Ballingen DEX</u>	City (Zip)
State or Country <u>GERMANY</u>	State or Country
Date <u>16.04.02</u> <u>[Signature]</u>	Signature <u>[Signature]</u>
Full Name of Second Joint Inventor <u>Fred ZESCHKY</u>	Citizenship GERMANY
RESIDENCE Address -- Street <u>Lerchenstrasse 10</u>	POST OFFICE Address -- Street (same as residence)
City (Zip) <u>D-72348 Rosenfeld DEX</u>	City (Zip)
State or Country <u>GERMANY</u>	State or Country
Date <u>16.04.02</u> <u>[Signature]</u>	Signature <u>[Signature]</u>
Full Name of Third Joint Inventor <u>Peter FRÖHLICH</u>	Citizenship GERMANY
RESIDENCE Address -- Street <u>Stollenau 12</u>	POST OFFICE Address -- Street (same as residence)
City (Zip) <u>D-72336 Balingen DEX</u>	City (Zip)
State or Country <u>GERMANY</u>	State or Country
Date <u>16.04.02</u> <u>[Signature]</u>	Signature <u>[Signature]</u>

☐ Additional inventors are being named on separately numbered sheets attached hereto.